

5. INTRACOASTAL WATERWAY

(1) The **Intracoastal Waterway** is a toll-free passage which roughly parallels the Atlantic Coast and extends 118 statute miles through bays, lagoons, thorofares, and land cuts from Manasquan Inlet to Delaware Bay at a point 2 miles north of Cape May Light.

(2) In addition to the Intracoastal Waterway and the waters through which it passes, this chapter also describes the several rivers and tributaries that empty into these waters, as well as some of the more important towns and landings along these waterways.

(3) The Intracoastal Waterway is used mainly by pleasure craft, and commercial and sport fishing vessels. The U. S. Army Corps of Engineers, Philadelphia Engineer District, has supervision of the waterway's construction, maintenance, and operation. (See appendix for address.)

(4) **Mileage.**—The Intracoastal Waterway mileage is zeroed in 40°06'03"N., 74°01'55"W., off the outer ends of the Manasquan Inlet jetties, which are 40 nautical miles by outside run from The Battery, N.Y.

(5) **Distances along the Intracoastal Waterway are in statute miles to facilitate reference to the small-craft charts 12324, 12316; all other distances are nautical miles. Mileage conversion tables are on page T-28.**

(6) **Channels.**—The channel of the Intracoastal Waterway is generally 100 feet wide and has dredged depths of 6 feet from Manasquan Inlet to Cape May Harbor, thence 12 feet through Cape May Canal to Delaware Bay.

(7) Effort is made to maintain a 6-foot controlling depth for the waterway, but due to continuous shoaling, 3 feet or less may be found in places, particularly inside the ocean inlets. (See Local Notice to Mariners and latest editions of charts for controlling depths.)

(8) **Bridges and cables.**—Minimum clearances of bridges and cables crossing the Intracoastal Waterway are as follows:

(9) **From Manasquan Inlet to Absecon Inlet:** clearance of overhead cables, 72 feet, **Mile 3.0**; horizontal clearance, 47 feet at bascule bridge, **Mile 3.0**; vertical clearance, 60 feet at fixed bridge, **Mile 14.1** and **Mile 37.4**. A vertical-lift bridge at **Mile 3.9** has clearances of 30 feet down and 65 feet up.

(10) **From Absecon Inlet to Delaware Bay:** vertical clearance, 35 feet at fixed bridges, **Miles 68.9, 84.3, 93.6, and 97.4**; clearance of overhead cables, 55 feet, **Mile 84.3**; horizontal clearance, 49 feet at bascule bridge, **Mile 78.0**.

(11) General drawbridge regulations and opening signals for bridges over the Intracoastal Waterway are given in **117.1 through 117.49**, chapter 2. **Special drawbridge regulations** for certain bridges that supplement the general regulations are referenced with the area description of the waterway.

(12) **Aids to navigation.**—The U.S. Coast Guard maintains the standard aids that mark the inlets and the special aids that mark the Intracoastal Waterway. The special aids have characteristic yellow markings which distinguish them from aids to navigation marking other waters. (See U.S. Coast Guard Light Lists or Chart 1 (Nautical Chart Symbols and Abbreviations) for illustrations of special markings.)

(13) The Department of Environmental Protection, State of New Jersey, maintains the aids to navigation on the rivers and creeks that empty into the New Jersey Intracoastal Waterway.

(14) Lights and daybeacons should not be passed close aboard because those marking dredged channels are usually placed back

from the bottom edge of the channel and others may have riprap mounds around them to protect the structures.

(15) The buoys marking the waterways are frequently shifted with changing channel conditions.

(16) **Charts.**—Navigation of the Intracoastal Waterway can be made easier by the use of the special small-craft series which the National Ocean Service publishes especially for that purpose.

(17) **Tides.**—In the inland waters, the tides are greatly affected by the winds both in time and height, westerly winds producing low water and easterly winds high water. In Barnegat Bay, northerly and southerly winds drive the water to the ends of the bay. While the normal range of tide is only about 0.5 foot in sections of the waterway removed from the inlets, strong winds of long duration may cause variations in level of as much as 3 feet below mean low water or 3 feet above mean high water. Near the inlets, the wind has less effect and the normal range of tide is 3 to 4 feet.

(18) **Currents.**—Current velocities may reach 3 knots in the inlets and in the narrow channels that connect the inlets with the inside waters.

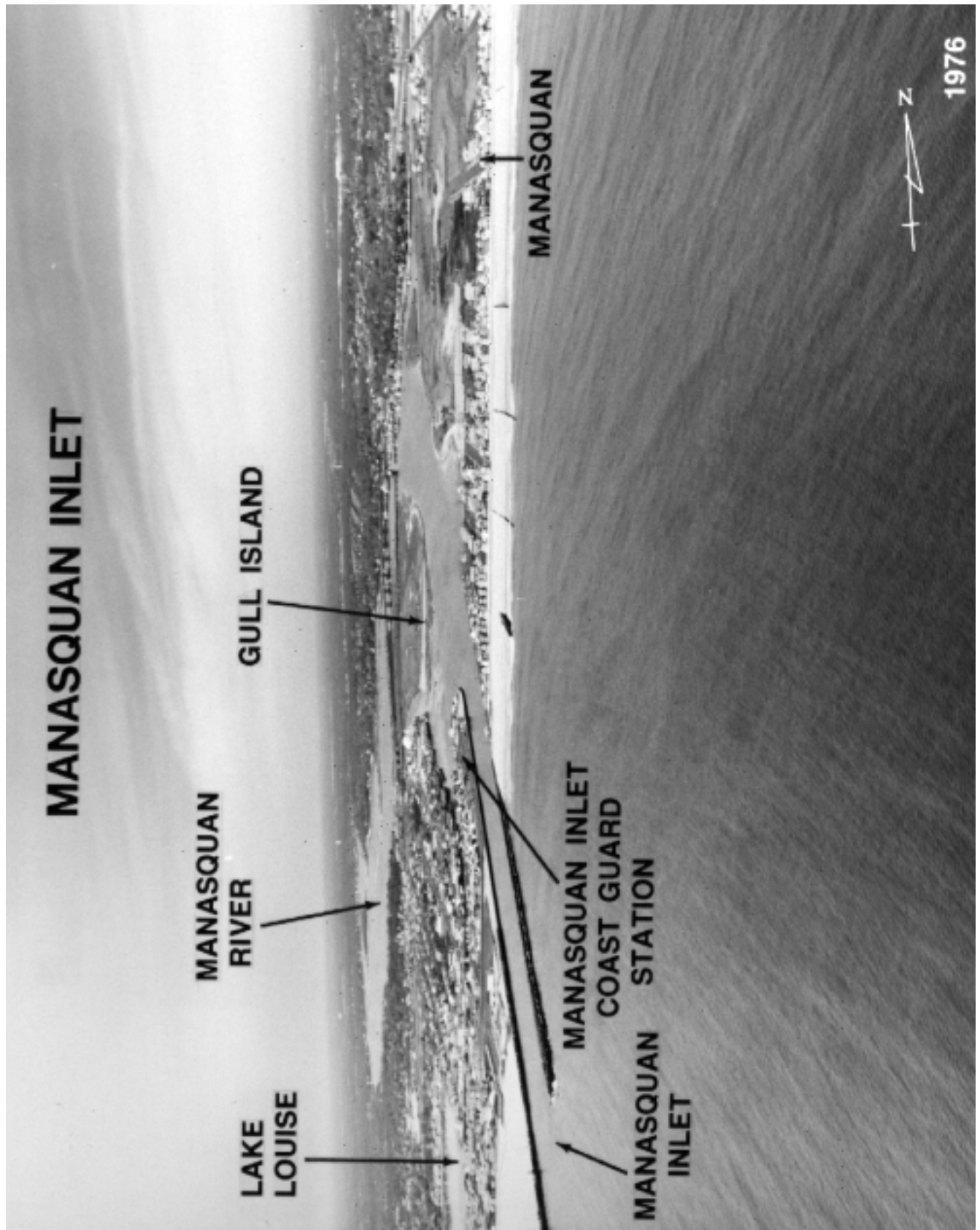
(19) **Ice.**—The inside waters are completely closed to navigation by ice during extreme winters. In ordinary winters, some of the channels, especially near the inlets where the currents are strong, remain open most of the time, though ice always forms on the flats. The inlets themselves are rarely closed, but passage is often difficult because of running ice. All the principal inlets and adjacent channels are used in winter by local fishing boats, but through navigation is usually blocked.

(20) **Weather.**—While the waterway is more protected than the open waters weather is critical since navigation is more confined. Winds diminish over land due to surface friction. However, winds and currents may be intensified in restricted channels and inlets. November through April is the windiest time of the year. Gales are encountered about 1 to 2 percent of the time while speeds greater than 16 knots occur about 10 to 17 percent of the time. Fog is also a problem particularly in restricted waterways. Visibilities drop below 0.5 mile (0.8 km) on about 2 to 5 days per month; they are best from mid to late summer. During the fall and early winter radiation fog often reduces morning visibilities but usually burns off by afternoon. At times in spring, advection fog from the open water may be carried ashore by winds with an easterly component. Smoke and precipitation also add to the problem in all seasons.

(21) Seas can be a problem at ocean entrances such as Manasquan Inlet, Barnegat Inlet, and Little Egg Inlet. This is true with strong winds between northeast and south, particularly on an ebb tide.

(22) **Facilities.**—At communities along or adjacent to the waterway are numerous piers, wharves, and docks, many of which are open to general public use. Fuel, water, and other supplies are readily available. Public and privately owned boat basins are located in many streams entering the bays and thorofares through which the waterway passes. Boat-repair and storage yards with marine railways are also scattered along the waterway. Facilities for icing, storing, and shipping seafood are available at most of the larger communities. (See the small-craft facilities tabulation on charts 12324 and 12316 for services and supplies available.)

(23) **COLREGS Demarcation Lines.**—The lines established for New York Harbor, the inlets of the New Jersey coast and Del-



aware Bay are described in **80.165, 80.170, 80.501 and 80.503**, chapter 2.

(24) **Charts 12316, 12324.—Manasquan Inlet**, 22 miles southward of Sandy Hook Light, is the northern terminus of the New Jersey Intracoastal Waterway, and the Atlantic entrance to shallow **Manasquan River**, which flows into the inlet from the westward. The inlet is used by many commercial fishing craft and pleasure craft. Mariners should exercise caution when entering Manasquan Inlet when the wind and tide are opposed; local knowledge is advised. **Manasquan Inlet Coast Guard Station** is on the south side of the inlet.

(25) Traffic conditions in Manasquan Inlet can be hazardous due to the large volume of commercial and pleasure boat traffic. Mariners are advised to exercise caution and control speed and wake while transiting the inlet. The Coast Guard monitors traffic in the inlet and safe boating is enforced.

(26) **Pilotage, Manasquan Inlet.**—Pilotage is compulsory for foreign vessels and U.S. vessels under register. Pilotage is available from the Sandy Hook Pilot Association, 201 Edgewater Street, Staten Island, NY 10305, telephone 718-448-3900, FAX 718-876-8055, e-mail: pilotoffice@sandyhookpilots.com. Arrangements for pilotage may be made through ship's agents or directly. A 24-hour advance notice is required.

(27) A marked dredged channel, protected at the inlet entrance by two jetties, leads through Manasquan Inlet to the first bridge. In December 2000, the controlling depth was 7.7 feet in the inlet through the jetties; thence in May 2000, 2.8 feet (8.6 feet at midchannel) to the first bridge.

(28) The north jetty is marked by a light on its outer end. The south jetty is marked by a light near the outer end; a fog signal is at the south jetty light, and a radiobeacon is close inshore of the light. Give the jetties a good berth to avoid any loose rocks.

(29) The mean range of tide is 4 feet in Manasquan Inlet and 3.5 feet at the railroad bridge (**Mile 1.0**). The current velocity is about 1.8 knots in the inlet.

(30) The resort towns of **Manasquan** and **Point Pleasant Beach** are on the north and south sides of Manasquan Inlet, respectively, while the towns of **Brielle (Mile 1.3)**, **Point Pleasant (Mile 2.6)**, and **Riviera Beach** (3.5 miles above the inlet jetties) are on Manasquan River.

(31) **Cooks Creek, Mile 0.4**, is an outlet for **Lake Louise** on the south side of Manasquan River. The fixed highway bridge over the creek has a 28-foot channel span with a clearance of 8 feet. Depths are about 6 feet below the bridge decreasing to 2 feet above it. In November 1993, shoaling to an unknown depth was reported in the entrance to the creek and the deepest water was available only near the center of the channel.

(32) **Crabtown Creek, Mile 0.9**, enters Manasquan River on the north side. The staked channel has a controlling depth of about 5 feet for 0.7 mile into the northwest fork. The highway bridge over the creek has a 31-foot bascule span with a clearance of 9 feet. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.)

(33) The railroad bridge at **Mile 1.0** has a 48-foot bascule span over Manasquan River with a clearance of 3 feet. The bridgetender monitors VHF-FM channel 13 (156.65 MHz); call sign, KT-4203. The State Route 35 highway bridge at **Mile 1.3** has a bascule span with a clearance of 30 feet. (See **117.1 through 117.59 and 117.733**, chapter 2, for drawbridge regulations.) The overhead power cable on the west side has a clearance

of 107 feet. The current velocity is about 2.2 knots at the highway bridge.

(34) The State Route 70 highway bridge over Manasquan River at Riviera Beach has a bascule span with a clearance of 15 feet. (See **117.1 through 117.59 and 117.727**, chapter 2, for drawbridge regulations.)

(35) Small-craft facilities are along Cooks Creek, Crabtown Creek, and tributaries, and up Manasquan River near the two bridges a mile inside Manasquan Inlet, and near Point Pleasant and Riviera Beach. Commercial fishing wharves, a 300-ton railway, and other small-craft facilities are along **Wills Hole Thoroughfare**, westward of Cooks Creek. In November 1993, depths of 2 to 12 feet were available. Mariners should favor the south side of the waterway for deepest water. (See the small-craft facilities tabulation on chart 12324 for services and supplies available.)

(36) From Manasquan Inlet, the New Jersey Intracoastal Waterway follows the dredged channel in Manasquan River to **Mile 2.7** where it turns south into the **Point Pleasant Canal**. The 1.9-mile narrow land cut has bulkheaded sides; vessels are required to pass through at a safe speed to avoid damage to structures and boats.

(37) Local sources, including both bridge tenders and the Marine Police, verified present data which indicate that the tides are greatly affected by winds, therefore, diminishing any regularity in the tidal cycle.

(38) **Mariners should consider the following precautionary measures before transiting the canal:**

(39) 1. The time differential of the tidal cycle between the Manasquan reference station, located at the railroad bridge crossing the Manasquan River, and Point Pleasant Canal is reported to be about 3 hours.

(40) 2. The safest time to transit the canal is at slack high water.

(41) 3. Existing wind conditions, in relation to tides, are extremely important factors to be considered when picking the time to transit.

(42) 4. Navigators should be especially precautionous of two-way traffic and of following too close, particularly at the bridges.

(43) At **Mile 3.0**, State Route 88 highway bridge crosses the canal to the town of **Point Pleasant**, on the east side of the canal; the bridge has a vertical lift span with clearances of 31 feet down and 66 feet up. Overhead power and TV cables on the south side of the bridge have a least clearance of 72 feet.

(44) At **Mile 3.9**, a vertical-lift highway bridge with a clearance of 30 feet down and 65 feet up crosses the canal. A small marina on the east side of the canal, at **Mile 4.1**, has some marine supplies and two travel lifts to 30 tons are available for hull and engine repairs.

(45) At **Mile 4.6**, the waterway route leaves the canal and passes through **Barnegat Bay**, which has a north-south length of about 25 miles. The western half of the bay has depths of 5 to 10 feet; the eastern half is mostly extensive flats.

(46) Supplies, repairs, and berthing facilities are available in **Bay Head Harbor** at the north end of Barnegat Bay; maximum haul-out capacities; railway, 80 feet; lift, 35 tons. The mean range of tide is 0.5 foot.

(47) **Beaverdam Creek** enters the west side of Barnegat Bay opposite **Mile 4.8**. The marked channel into the creek has a controlling depth of about 3 feet. The Beaverdam Road highway bridge, 0.4 mile from the mouth, has a swing span with a 40-foot

channel width and a clearance of 14 feet. (See **11 7.1 through 117.59 and 117.705**, chapter 2, for drawbridge regulations.) In October 1998, a replacement bridge was under construction. The overhead power cable on the east side of the bridge has a clearance of 55 feet. (See the small-craft facilities tabulation on chart 12324 for services and supplies available.)

(48) **Metedeconk River**, separated from Beaverdam Creek by **Wardells Neck**, flows eastward into Barnegat Bay. The northern approach to the river is the same as for Beaverdam Creek; the southern approach is a marked passage between **Herring Island** and **Metedeconk Neck**. The controlling depth into the river is about 4 feet; depths above the entrances are 5 to 8 feet for about 3 miles.

(49) **Laurelton**, 4 miles up Metedeconk River from the Intracoastal Waterway, has facilities for small craft. Under average conditions, boats drawing as much as 3 feet can maneuver the shallow channel to Laurelton; the mean range of tide is almost negligible, and the wind has much more effect than the tide. (See the small-craft facilities tabulation on chart 12324 for services and supplies available.)

(50) At **Mile 6.3**, the County Route 528 bascule highway bridge over Barnegat Bay to **Mantoloking** on the barrier beach has a clearance of 14 feet. (See **117.733**, chapter 2, for drawbridge regulations.) There are facilities on the west side of the waterway on both sides of the bridge. Fuel, supplies, repairs, and slips are available; maximum haul-out capacities; railway, 75 feet; lift, 50 tons.

(51) **Caution:** In July 1983, numerous stakes were reported on the west side of the waterway in the vicinity of **Mile 7.3**, in about 40°01'55"N., 74°03'50"W.

(52) **Kettle Creek** flows southeastward into Barnegat Bay opposite **Mile 9.6**. The creek has depths of 4 feet to the forks, 1.4 miles above the mouth. Gasoline and some supplies are available.

(53) **Shelter Cove**, on the west side of Barnegat Bay at the entrance to **Goose Creek**, opposite **Mile 12.8**, has some supplies and slips. Repairs can be made; travel lift, 15 tons. The controlling depth into the cove is about 5 feet.

(54) A marked 6-foot channel follows the inner barrier beach from **Lavallette**, east of **Mile 10.7**, to **Seaside Heights**, east of **Mile 14.1**. The 31-foot-wide fixed bridge to **West Point Island**, east of **Mile 12.6**, has a clearance of 10 feet, but with local knowledge, the bridge can be bypassed through the narrow channel west of the island.

(55) There are many facilities along the inner barrier beach from **Mile 9.5** to **Mile 16.0**. (See the small-craft facilities tabulation on chart 12324 for services and supplies available.)

(56) At **Mile 14.1**, State Route 37 highway bridge over Barnegat Bay has a bascule span with a clearance of 30 feet. (See **117.1 through 117.59 and 117.733**, chapter 2, for drawbridge regulations.) The fixed span of this bridge between **Pelican Island** and **Seaside Heights** has a clearance 15 feet. A fixed highway bridge with a clearance of 60 feet is adjacent northward of the bascule bridge.

(57) The municipal dock, 0.2 mile south of the bridge on the inner side of **Seaside Heights**, has depths of about 7 feet at the face.

(58) **Toms River**, which empties into the west side of Barnegat Bay at **Mile 14.6**, has midchannel depths of 3½ to 5 feet. The mean range of tide is 0.6 foot in the river. The channel is well marked. In October 1982, shoaling to an unknown extent was re-

ported about 0.25 mile south of Long Point in about 39°56'00"N., 74°08'19"W.

(59) **Island Heights**, on the high wooded point on the north side of Toms River, 1.7 miles above Barnegat Bay, has a public pier with about 5 feet alongside. Fuel, supplies, and slips are available at several facilities. Repairs can be made; largest haul-out capacities: lifts to 25 tons.

(60) The town of **Toms River**, 4 miles upriver from Barnegat Bay, is the head of navigation; controlling depth to the town is about 5 feet. There are complete fuel, supply, repair, and slip facilities; maximum haul-out capacities; railway, 60 feet; lift, 60 tons.

(61) Gasoline, some marine supplies, and slips are available at a marina on **Goodluck Point at Mile 16.2**. Minor motor repairs can be made; largest lift, 25 tons.

(62) In 1973, a piling, 6 inches in diameter and extending 1 foot above the water at low tide, was reported off Goodluck Point in about 39°56.1'N., 74°06.4'W.

(63) **Cedar Creek**, which empties into the west side of Barnegat Bay at **Mile 20.2**, has depths of 3 to 4 feet. There is a light on the south side of the entrance to the creek. Small-craft facilities along the 1.4-mile navigable length of Cedar Creek have gasoline, supplies, and berths; repairs can be made; lifts to 36 tons.

(64) **Forked River**, on the west side of Barnegat Bay opposite **Mile 23.8**, is entered by a marked channel which leads to the head of navigation at the town of **Forked River**, about 1.8 miles above the bay. In October 1978, the controlling depth was reported to be 4½ feet. In October 1993, a sunken wreck was reported in the entrance to the river in about 39°49'24"N., 74°09'09"W. The river forks into three branches about halfway up; the town is on the north side of **North Branch**. Forked River is reported to afford excellent hurricane shelter.

(65) There are several marinas and boatyards on both sides of North Branch. (See the small-craft facilities tabulation on chart 12324 for services and supplies available.)

(66) A State marina is at the head of North Branch. The **harbormaster** at this facility assigns transient berths. The New Jersey Bureau of Coastal Engineering, Aids to Navigation Section, is based at the marina and can provide mariners with the latest information of conditions on the Intracoastal Waterway, and on other waters marked by the State of New Jersey.

(67) **Oyster Creek**, on the west side of Barnegat Bay opposite **Mile 24.7**, has a navigable length of over 1 mile to Highway 9 bridge. In March 1981, the Coast Guard advised mariners that passage should not be attempted because of severe shoaling reported in the creek.

(68) At **Mile 25.9**, Oyster Creek Channel leads eastward to Barnegat Inlet. The channel and the inlet were described in chapter 4.

(69) **Waretown**, west of **Mile 26.3** on the bay shore, has many small-craft facilities along its easterly shore, and in **Waretown Creek**, on the north side of town, and in the small-boat basin, known as **Sanborn Anchorage**, on the south side of town. Controlling depths are about 4 feet in Waretown Creek and about 5 feet in Sanborn Anchorage. (See the small-craft facilities tabulation on chart 12324 for services and supplies available.)

(70) **Double Creek**, southwest of **Mile 28.0**, is protected on the north side of its entrance by a jetty which has a light on its outer end. The channel is navigable to just above the fixed highway bridge 0.7 mile above Barnegat Bay. (See the small-craft fa-

cilities tabulation on chart 12324 for services and supplies available.) In 1981-June 1987, severe shoaling was reported in the entrance and in the creek.

(71) In July 1980, a submerged pile was reported in the channel about 20 feet east of Light 62 at **Mile 35.6**.

(72) In May 1990, a visible wreck was reported close east of Daybeacon 64 in about 39°40'12"N., 74°11'18"W. at **Mile 36.3**.

(73) At **Mile 37.4**, a fixed highway bridge with a clearance of 60 feet over the intracoastal route through **Manahawkin Bay** connects the westerly shore of the bay with the barrier beach. The bridge also crosses three minor channels, one close to the westerly shore of the bay, one between the two marshy islands on the east side of the bay, and the other between the more easterly island and the barrier beach. Clearances over these minor channels, from north to east, are: 15 feet, 11 feet for a width of 27 feet, and 15 feet, respectively. An overhead power cable, on the north side of the bridge and submerged at the intracoastal route, parallels the bridge for its entire length. Overhead clearances elsewhere are: 19 feet between the westerly shore of Manahawkin Bay and the first island on the east side of the bay, 18 feet between the two islands, and 22 feet between the more easterly island and the barrier beach.

(74) There are many small-craft facilities along the bay shore of **Long Beach** between Barnegat Inlet and Beach Haven Inlet. (See also chart 12316.) Most of these are near the bridge at **Mile 37.4**, at **Ship Bottom, Mile 39.0**, and at **Beach Haven, Mile 45.7**. (See the small-craft facilities tabulation on chart 12324 for services and supplies available.)

(75) **Westecunk Creek**, 2 miles northwest of **Mile 42.5**, is marked at the entrance by a light. A marked channel leads from Little Egg Harbor to a public landing 2.5 miles above the mouth of the creek. In April 1999, the channel had a reported controlling depth of 6 feet. The town of **West Creek** is 0.3 mile west of the landing. Small-craft facilities are on the southwesterly side of the creek. (See the small-craft facilities tabulation on chart 12324 for services and supplies available.)

(76) **Chart 12316.—Little Egg Harbor** has general depths of 4 to 6 feet in its northwestern part; in the southern part is a large group of marshy islands surrounded by a shallow area with depths of 1 to 3 feet. Buoys mark a race course in the harbor. Between some of these islands are narrow unmarked channels which begin and end abruptly in the shallow areas. The Intracoastal Waterway continues southward along the inner side of the barrier beach.

(77) **Parker Cove** is on the north side of Little Egg Harbor about 3 miles northwest of **Mile 44.3**. **Parker Run**, marked by a light on the south side of the entrance, empties into the northwest corner of the cove. Depths of about 4 feet can be carried to a public dock on the north side of Parker Run, 0.3 mile above the entrance. Berthage and gasoline are available at the dock.

(78) **Tuckerton Creek** empties into the west side of Little Egg Harbor about 4 miles northwest of **Mile 49.4**. A dredged approach, marked by lights, extends 1.6 miles southeastward from the mouth of the creek to the north end of **Story Island Channel**. In 1998-June 1999, the centerline controlling depth was 3 feet to the mouth of the creek; thence in 1977-June 1999, 1 foot to **Parkers Landing**, 0.9 mile above the entrance; thence 2½ feet to **Scow Landing**, 1.6 miles above the entrance; and thence ½ foot to the milldam at **Tuckerton**, 1.8 miles above the mouth. An

overhead power cable, 0.6 mile above the mouth, has a clearance of 50 feet.

(79) The mean range of tide is 2.4 feet throughout the Tuckerton Creek channel. Cross currents may be experienced in the approach channel. A **speed limit** of 8 miles per hour is prescribed for the channel. (See **162.30**, chapter 2.)

(80) There are numerous small-craft facilities along the creek, and on the north side of the approach channel below the entrance to the creek. (See the small-craft facilities tabulation on chart 12316 for services and supplies available.)

(81) At **Mile 50.2, Marshelder Channel**, with depths of 7 feet or more, makes northward and around the southwest side of **Story Island** for 2.5 miles to Little Egg Harbor and the dredged approach to Tuckerton Creek.

(82) There are several thorofares through the marsh area south and west of Marshelder Channel, but **Little Sheepshead Creek** is the only one of any importance. This 2-mile winding passage from **Mile 50.7** of the Intracoastal Waterway to the eastern side of Great Bay is used extensively. In 1973, shoaling to 1 foot was reported in the creek in about 39°31'20"N., 74°19'16"W. The fixed highway bridge over Little Sheepshead Creek has an 18-foot channel span with a clearance of 14 feet; overhead power cables have a least clearance of 36 feet.

(83) The waterway route skirts the inner ends of the shoals in **Beach Haven Inlet** and **Little Egg Inlet**, both mentioned in chapter 4, and continues westward through **Shooting Thorofare** and along the south side of **Great Bay**, which has general depths of 4 to 7 feet.

(84) **Big Creek**, marked by a light at the entrance, empties into the north side of Great Bay opposite **Mile 55.0**. Depths of about 5 feet can be carried to a large marina 2 miles above the mouth. A highway bridge with a 30-foot fixed span and a clearance of 12 feet crosses the creek 1.2 miles above the mouth. Gasoline, berths, some marine supplies, and a 10-ton lift are available at the marina; hull, engine, and electronic repairs can be made.

(85) **Mullica River**, which empties into the northwestern part of Great Bay, is navigable to a milldam 20 miles above the bay. In June 1998, it was reported a depth of about 5 feet can be carried across the Great Bay flats to the mouth of the river. Once inside the river, the water is deep and the midchannel is clear for a long distance.

(86) In June 1998, it was reported that depths of 8 to 4 feet can be carried from the mouth of Mullica River to the bridge 16 miles above the entrance, and thence 2½ feet to within a mile of the milldam. A lighted cutoff, 3 miles above the mouth, has ample depth and reduces distances to points on the upper river by about 2 miles.

(87) The navigation of Mullica River is fairly easy in the lower reaches, but the chart should be followed closely to avoid the unmarked 3-foot shoals in the entrance. The last few miles to the milldam are shallow, difficult, and full of stumps. The river is marked by lights and stake daybeacons as far as the first bridge; stake daybeacons mark the reaches above the bridge.

(88) The fixed highway bridge, 6.5 miles above the mouth of Mullica River, has a clearance of 30 feet; overhead power cables, 500 feet above the bridge, have a clearance of 50 feet. A boatyard, 0.5 mile below the bridge, has an 8-ton lift; hull and engine repairs can be made, and gasoline and marine supplies are available. The highway bridge 13 miles above the mouth has a 30-foot bascule span with a clearance of 6 feet. An overhead power cable just above the highway bridge has a clearance of 39

feet. The highway bridge, 16 miles above the mouth, has a 30-foot bascule span with a clearance of 5 feet. (See **117.1 through 117.59 and 117.731a**, chapter 2, for drawbridge regulations.) Gasoline, some supplies, and slips are available at small-craft facilities at **Green Bank** and **Sweetwater**, about 16 and 17 miles above the mouth, respectively. Minor repairs can be made; largest lift, 3 tons.

(89) **Nacote Creek** empties into the southwest side of Mullica River 4 miles above the mouth. Controlling depths are about 5 feet to the U.S. Route 9 highway bridge, 1.6 miles above the mouth of the creek, and thence 3 feet to **Port Republic**, at the head of navigation 3.6 miles from the mouth. The U.S. Route 9 bridge has a 30-foot bascule span with a clearance of 5 feet. In July 2001, a fixed highway bridge was under construction with a design clearance of 25 feet; upon completion, it will replace the bascule bridge. The overhead power cables just upstream of the bridge have a clearance of 60 feet.

(90) State Route 575 drawbridge crosses the creek about 3 miles above the mouth. (See **117.1 through 117.59 and 117.732**, chapter 2, for drawbridge regulations.)

(91) A boatyard is on the north side of the creek just below the U.S. Route 9 bridge. Berths and gasoline are available; lifts to 10 tons can handle hull and motor repairs.

(92) **Bass River**, which empties into the north side of Mullica River 5 miles above the mouth, has depths of about 4 feet to **New Gretna**, 2.4 miles above Mullica River. The U.S. Route 9 highway bridge at New Gretna has a 30-foot bascule span with a clearance of 9 feet. (See **117.1 through 117.59 and 117.703**, chapter 2, for drawbridge regulations.) The overhead power cable just below the bridge has a clearance of 42 feet. The fixed highway bridge just upstream has a clearance of 20 feet. Small-craft facilities, on both sides of the creek just below the bascule bridge, have berths, gasoline, diesel fuel by truck, water, ice, and marine supplies. Hull, engine, and electronic repairs can be made; largest lift, 50 tons.

(93) **Wading River**, which empties into the north side of Mullica River 7.5 miles above the mouth, has depths of about 4 feet to State Route 542 highway bridge 4 miles upstream. The bridge has a 30-foot bascule span with a clearance of 5 feet. (See **117.1 through 117.59 and 117.759**, chapter 2, for drawbridge regulations.)

(94) **Mott Creek**, on the west side of Great Bay, is marked by a light and has depths of about 4 feet to a bulkhead landing 1.5 miles above the mouth; gasoline and some supplies are available. The 2-mile thorofare that winds northward through the marshes from the Mott Creek landing to the mouth of Nacote Creek has a controlling depth of about 2 feet.

(95) **Oyster Creek**, on the west side of Great Bay 0.7 mile south of Mott Creek, is marked by a light and has depths of 4 feet to the small fishing village of **Oyster Creek**, 0.3 mile from the mouth, and 0.2 mile beyond to a public landing.

(96) The Intracoastal Waterway leaves Great Bay at **Mile 56.8** and follows **Main Marsh Thorofare** to **Little Bay**, and thence along the western side of Little Bay across the mouths of **Hammock Cove**, and **Perch Cove** and westward of **Shad Island**.

(97) At **Mile 60.3**, an alternate route swings eastward in **Brigantine Channel**, which leads to **Brigantine Inlet**, mentioned in chapter 4. About 1.3 miles along the channel, the alternate route turns southward and follows **Obes Thorofare** along the inner side of Brigantine. The overhead power cable that crosses Obes

Thorofare, 1.3 miles from Brigantine Channel, has a clearance of 47 feet.

(98) There are many small-craft facilities along the bay side of **Brigantine**. **Baremore Quarters**, a cove on the inner side of Brigantine 2.3 miles along Obes Thorofare from Brigantine Channel, is a good harbor of refuge. (See the small-craft facilities tabulation on chart 12316 for services and supplies available.)

(99) From Baremore Quarters, the alternate route follows **Bonita Tideway** along the city waterfront, then swings westward through **Golden Hammock Thorofare** and rejoins the main route at **Mile 64.2**. The total length of the alternate route is 7 miles. Depths of 5 feet or more are on the alternate route along the inner side of Brigantine, but the channel shoals as it nears the main Intracoastal Waterway route and can be navigated only by shallow drafts.

(100) The main route of the waterway leaves Little Bay at **Mile 60.3** and continues along the northwestern side of **Grassy Bay**, a shoal area mostly bare at low water, to **Meadow Cut**. From this short land cut, the route follows the southeastern side of **Reed Bay** to and through **Gull Island Thorofare**, across the mouth of **Broad Creek**, through **Middle Thorofare**, where it is rejoined by the alternate route from Brigantine, and into Absecon Channel at **Mile 64.5**, which leads to Absecon Inlet and the marine facilities in Clam Creek at **Atlantic City**. (See chapter 4.)

(101) **Absecon Channel**, the marked approach to Absecon Creek through Absecon Bay, can be entered at **Mile 64.5** or through **Point Bar Thorofare** at **Mile 65.6**. **Absecon Bay** is shallow and bares in some places at low water.

(102) **Absecon Creek**, which flows into the northwest side of the bay, is crossed by three fixed bridges, about 1.5 miles above the mouth, at **Absecon**; least clearance is 3 feet. A marked channel with reported depths of about 5 feet leads across Absecon Bay to the mouth of the creek. In October 1999, the reported midchannel controlling depth in the creek was 5 feet from the mouth to the bridges; the creek is reported navigable by small outboards for about 2 miles above the bridges. The mean range of tide is 3.6 feet at the mouth of Absecon Creek. A small-craft facility is on the north side of the creek, about 0.5 mile below the bridges. A 10-ton lift, a 34-foot marine railway, towing, some marine supplies, winter boat storage, and hull, motor, and radio repairs are available.

(103) From Absecon Channel, the Intracoastal Waterway follows **Beach Thorofare** along the northwest side of Atlantic City. U.S. Route 30 highway bridge, over the thorofare at **Mile 67.2**, has a bascule span with a clearance of 20 feet.

(104) The ConRail railroad bridge over Beach Thorofare at **Mile 68.9** has a swing span with a clearance of 5 feet. (See **117.1 through 117.59 and 117.733**, chapter 2, for drawbridge regulations.) A fixed highway bridge, 200 feet south of the railroad bridge, has a clearance of 35 feet.

(105) The route of the Intracoastal Waterway leaves Beach Thorofare at **Mile 69.5** and continues along the inner side of Atlantic City by way of **Inside Thorofare**. Albany Avenue (U.S. Routes 40-322) Bridge, which crosses Inside Thorofare at **Mile 70.0**, has a bascule span with a clearance of 10 feet. (See **117.1 through 117.59 and 117.733**, chapter 2, for drawbridge regulations.)

(106) The Dorset Avenue highway bridge over the waterway at **Mile 71.2** connects **Ventnor Heights**, on the northwest side, with **Ventnor City**, on the beach; the bridge has a bascule span with a clearance of 9 feet. (See **117.1 through 117.59 and 117.733**,

chapter 2, for drawbridge regulations.) A small-craft facility below the bridge at Ventnor Heights offers motor repairs and winter boat storage.

(107) The waterway turns sharply northwestward at **Mile 71.4** and follows **West Canal** along the southwest side of Ventnor Heights to **Mile 72.3**, where it rejoins Beach Thorofare and continues southwestward.

(108) From **Mile 73.3** southwest of **Shelter Island**, a marked channel with a controlling depth of about 3 feet leads northward along the eastern shores of **Shelter Island Bay** and **Lakes Bay** to **West Atlantic City**, 2.2 miles from the waterway. The channel continues along the north shore of Lakes Bay to a yacht club at **Pleasantville**, 3.4 miles from the waterway.

(109) The highway bridge over Beach Thorofare at **Mile 74.0** has a bascule span with a clearance of 14 feet. **Margate City** is on the beach south of the bridge. Several small-craft facilities are at Margate City. (See the small-craft facilities tabulation on chart 12316 for services and supplies available.)

(110) At **Mile 75.4**, **Risley Channel** and **Dock Thorofare** leads northward for 2.2 miles to a marine basin near **Northfield**. Small-craft facilities, on the northwesterly side of Dock Thorofare, can provide gasoline, diesel fuel, water, ice, and marine supplies. Hull and engine repairs can be made; largest lift, 50 tons.

(111) At **Mile 75.4** there is a choice of two routes to the inner side of Ocean City. The exposed route west of the **Longport** waterfront and across **Great Egg Harbor Inlet** has deeper water, but is restricted by the 25-foot clearance of the fixed highway bridge, 0.2 mile south-southwestward of **Mile 75.4**. Care is necessary when passing through the bridge to avoid the shoal making out into the channel from the west side. Currents are strong at the inlet crossing, and the route is exposed to heavy easterly seas. The highway bridge over the inlet, 0.4 mile eastward of **Mile 79.1**, has a bascule span with a clearance of 23 feet at the center. The bridgetender monitors VHF-FM channel 13; call sign WQZ-343. In January 2000, a replacement fixed highway bridge with a design clearance of 65 feet was under construction.

(112) The protected route is through Risley Channel and **Broad Thorofare**, but the channel is subject to continuous shoaling. State Route 152 fixed highway bridge over Broad Thorofare at **Mile 78.0** has a vertical clearance of 56 feet

(113) **Ship Channel** extends northwestward from **Mile 79.1** to Great Egg Harbor Bay. **Bass Harbor**, a narrow channel leading northward from Ship Channel 1.7 miles from the inlet bridge, has depths of about 10 feet in the entrance; State Route 152 fixed highway bridge, 0.3 mile north of the entrance, has a 14-foot span with a clearance of 6 feet. In 1989, the fixed highway bridge was under construction.

(114) **Somers Point**, on the north side of Ship Channel 2 miles from the inlet bridge, is a summer resort with wharves that have depths of 2 to 5 feet at their outer ends.

(115) There are many marinas and boatyards in Bass Harbor and along Somers Point. (See the small-craft facilities tabulation on chart 12316 for services and supplies available.)

(116) A 2-mile combination of highway bridges and causeways extends southeastward over the channels and islands in **Great Egg Harbor Bay** from Somers Point to Ocean City. The bascule span over Ship Channel has a clearance of 14 feet. The State Route 52 bascule span over the Intracoastal Waterway at **Mile 80.4**, on the inner side of Ocean City, also has a clearance of 14 feet. (See 117.1 through 117.59, 117.733, and 117.753, chapter

2, for drawbridge regulations for the bridges over Ship Channel and the Intracoastal Waterway, respectively.)

(117) The fixed highway bridges that cross Great Egg Harbor Bay, 2 miles westward of the bridge crossing the waterway at **Mile 80.4**, have central-span clearances of 50 feet. An older highway bridge, 0.2 mile to the westward, has a bascule span with a clearance of 14 feet. About 0.5 mile above the old bridge, an overhead power cable, with a clearance of 76 feet over the channel and 50 feet outside the channel, crosses near the head of the bay.

(118) **Patcong Creek**, marked on the westerly side of the entrance by a light, empties into the north side of Great Egg Harbor Bay, 2.6 miles northwestward of the bridge at **Mile 80.4**. The depth over the bar at the entrance is about 3 feet. A fixed highway bridge, 0.5 mile above the mouth of the creek, has a clearance of 15 feet.

(119) The fixed highway bridge, 2.8 miles above the entrance to Patcong Creek, has a channel span with a clearance of 8 feet. Another fixed highway bridge, 3.5 miles above the entrance, has a clearance of 7 feet; about 100 yards below this bridge, the decomposed piles of a former dam extend westward of midstream and are extremely dangerous. Gasoline, some supplies, and slips are available near the first bridge. Repairs can be made; lift, 10 tons.

(120) **Tuckahoe River**, marked at the entrance by a light, empties into the south side of Great Egg Harbor 2.7 miles westward of the bridge at **Mile 80.4**. Controlling depths are about 2 feet across the flats at the entrance, thence 3 feet for 7 miles to the town of **Tuckahoe**. The overhead power cable, 1 mile below Tuckahoe, has a clearance of 41 feet. The State Route 50 highway bridge at the town has a 30-foot bascule span with a clearance of 9 feet. (See 117.1 through 117.59 and 117.757, chapter 2, for drawbridge regulations.)

(121) A boatyard is just below the bridge. Gasoline and some marine supplies can be obtained. Complete repairs can be made; a 120-foot marine railway and a 60-ton mobile hoist are available.

(122) **Cedar Swamp Creek** empties into the south side of Tuckahoe River 4.3 miles above the river mouth. The creek has depths of about 4 feet to a highway culvert 2.5 miles from the river where a marine railway can haul out boats up to 25 feet for repairs.

(123) **Great Egg Harbor River** is a northwestward continuation of Great Egg Harbor Bay. The controlling depth is about 4 feet from Great Egg Harbor Bay to Mays Landing, at the head of navigation. The overhead power cables between the bay and Mays Landing have clearances of 65 feet or more. The mean range of tide is 4.0 feet at Mays Landing.

(124) **Middle River** empties into the southwest side of Great Egg Harbor River 0.5 mile above the bay. Depths of 4 feet can be carried up Middle River for 2 miles.

(125) **Powell Creek** empties into the east side of Great Egg Harbor River 5 miles above the bay. Depths of about 2½ feet can be taken to the small-craft facilities about 0.5 mile above the mouth. Gasoline, berths, electricity, water, ice, launching ramp, and some marine supplies are available. Hull, engine, and electric repairs can be made; lift, 15 tons for vessels to 34 feet in length.

(126) Small-craft facilities are on the east side of Great Egg Harbor River, about 8 miles above the mouth. Berths, gasoline, and water are available. Repairs can be made; lift, 15 tons.

(127) **Mays Landing**, at the head of navigation on Great Egg Harbor River, is 12 miles from Great Egg Harbor Bay. The river water is nearly fresh at the town. The town bulkhead has depths of about 5 feet alongside. A marina here can provide gasoline, berths, water, ice, and some marine supplies. Minor hull and engine repairs can be made; marine railway, 50 feet; lift, 3 tons.

(128) The Intracoastal Waterway continues southerly along the inner side of **Ocean City**; lagoons here accommodate craft drawing up to 5 feet. (See the small-craft facilities tabulation on chart 12316 for services and supplies available.)

(129) The waterway follows **Beach Thorofare to Peck Bay**; the mudflats bordering the channel through the bay are visible in some places at low water. The highway bridge at **Mile 84.3** has a fixed channel span with a clearance of 35 feet. An overhead power cable, close southward of the bridge, has a clearance of 55 feet. Just north of the bridge on the west side of the waterway, is a year-round, full service marina with a 3-foot controlling depth reported in 1999. Berths with electricity, gasoline, diesel fuel, water, and all types of repairs are available.

(130) From Peck Bay, the route follows **Crook Horn Creek**. The railroad bridge over the creek at **Mile 86.6** has a swing span with a clearance of 2 feet. In October 1992, the bridge was being removed.

(131) The waterway enters **Middle Thorofare** at **Mile 88.0**, thence continues through **Ben Hands Thorofare** to **Mile 89.8** in **Main Channel**, which leads eastward and northward for 1.5 miles to the inner side of **Strathmere**, just south of Corson Inlet. The highway bridge over the waterfront channel at Strathmere has a bascule span with a clearance of 15 feet. The bridgetender monitors VHF-FM channel 13; call sign WQZ-342. There are several small-craft facilities at Strathmere; gasoline, berths, water, ice, and some marine supplies can be obtained. Engine repairs can be made; marine railway, 14 feet.

(132) The waterway follows Main Channel southwestward, passing into shallow **Ludlam Bay** at **Mile 91.3** and enters **Ludlam Thorofare** at **Mile 92.5**. The fixed highway bridge at **Mile 93.6** has a clearance of 35 feet, and the overhead power cables crossing at **Mile 93.8** have a least clearance of 56 feet.

(133) **Sea Isle City**, on the barrier beach at the southeast end of the bridge at **Mile 93.6**, has several basins with depths of 3 to 6½ feet in the entrances and slightly more inside. (See the small-craft facilities tabulation on chart 12316 for services and supplies available.)

(134) The Intracoastal Waterway enters **Townsend Channel** at **Mile 95.3** and follows the inner side of the resort known as **Townsend's Inlet**. Gasoline, diesel fuel, water, ice, berths, and marine supplies are available at the small-craft facilities at Townsend's Inlet. Engine repairs can be made; marine railway, 35 feet.

(135) At **Mile 96.4**, the waterway is 300 yards west of the highway bridge over **Townsend's Inlet**, described in chapter 4. **Avalon**, on the southwest side of the inlet, is separated from the waterway's **Ingram Thorofare** by a wide marsh area.

(136) **Cornell Harbor**, a channel with a reported depth of 5 feet in March 1980, leads southeastward through the marsh from **Mile 96.8** to Avalon thence along the inner side of the resort.

(137) **Pennsylvania Harbor**, 0.5 mile southwestward of Cornell Harbor, had a reported controlling depth of 6 feet in March-June 1980. **Princeton Harbor**, 0.2 mile southwestward of Pennsylvania Harbor, had a reported controlling depth of 6 feet in March-June 1980. Both waterways lead to the Avalon wa-

terfront. The fixed bridges over the Avalon channel at the inner ends of the two harbors restrict passage between them or to the southwest to an overhead clearance of 4 feet.

(138) Gasoline, diesel fuel, water, ice, berths, some marine supplies, and an 8-ton crane are available at Avalon. Gasoline, berths, water, ice, and some marine supplies; lifts to 25 tons can handle hull and motor repairs.

(139) A fixed highway bridge with a clearance of 35 feet crosses **Ingram Thorofare** at **Mile 98.1**.

(140) The waterway follows **Ingram Thorofare** westward to **Paddy Thorofare**, thence into shallow **Great Sound** at **Mile 98.9**. At **Mile 100.0**, the route leaves Great Sound and follows **Gull Island Thorofare** southward to the Stone Harbor waterfront.

(141) **Stone Harbor** is a resort on the northeast side of Hereford Inlet. The highway bridge over the waterway at **Mile 102.0** has a bascule span with a 10-foot clearance. (See **117.1 through 117.59 and 117.733**, chapter 2, for drawbridge regulations.)

(142) Several basins are along the Stone Harbor waterfront. (See the small-craft facilities tabulation on chart 12316 for services and supplies available.)

(143) The waterway follows **Great Channel** southwestward along the Stone Harbor waterfront, then turns sharply westward at **Mile 103.3** and follows the northwestern shore of **Nummy Island**. The bridge over the channel that leads along the east side of Nummy Island to Hereford Inlet was described in chapter 4.

(144) At **Mile 104.6**, the waterway route through **Grassy Sound Channel** is joined by the main channel from Hereford Inlet. The bascule bridge over the inlet channel was described in chapter 4.

(145) **Beach Creek**, on the inner side of North Wildwood just south of Hereford Inlet, has depths of about 2 feet in the entrance, but deeper water inside. The fixed bridge, 0.4 mile above the entrance, has a channel width of 17 feet and a clearance of 5 feet. In May 1991, a replacement fixed highway bridge with a design clearance of 14 feet was under construction close north of the existing bridge.

(146) The highway bridge over the waterway at **Mile 105.2** has a bascule span with an 8-foot clearance. In May 1991, a fixed highway bridge with a design clearance of 55 feet was under construction close south of the bascule bridge. Upon completion, it will replace the bascule bridge. The route enters **Grassy Sound** at **Mile 106.1** and follows a well-marked channel. In August 1983, the north-northwest abutment of the railroad bridge at **Mile 107.5**, at the southwestern end of Grassy Sound, had collapsed into the channel. In September 1983, the bridge was being dismantled; extreme caution is advised in this area. An overhead power cable near the bridge has a 100-foot clearance.

(147) East of the bridge at **Mile 107.5**, a 5-foot channel leads along the northeast side of West Wildwood for 0.8 mile to the inner waterfront of **Wildwood**. Passage is limited by the 5-foot clearances of the fixed bridges that connect the two communities.

(148) At **Mile 108.7**, **Post Creek** extends eastward from the waterway and widens into a small bay between Wildwood and West Wildwood. **Ottens Harbor**, a dredged slip with depths of about 10 feet, extends 0.5 mile southeastward from the mouth of Post Creek. Commercial wharves along the waterway can accommodate vessels up to 150 feet.

(149) The highway bridge over the waterway at **Mile 108.9** has a bascule span with a 25-foot clearance.

(150) **Sunset Lake**, a comparatively deep basin on the inner side of **Wildwood Crest**, can be entered from either **Mile 109.3** or **Mile 110.2** of the Intracoastal route. The controlling depth is about 7 feet in the entrances.

(151) Many small-craft facilities are along the Wildwood waterfront. (See the small-craft facilities tabulation on chart 12316 for services and supplies available.)

(152) The waterway continues southward through **Jarvis Sound** and **Middle Thorofare**. The highway bridge over Middle Thorofare at **Mile 112.2** has a bascule span with a clearance of 23 feet. The bridgetender monitors VHF-FM channel 13; call sign WQZ-342. Just north of the bridge, **Lower Thorofare** leads eastward from the waterway for 0.3 mile, then turns northward. There is a long marginal fish wharf on the east side of Lower Thorofare; fuel and supplies are available.

(153) The waterway route crosses the inner end of **Cape May Inlet** at **Mile 112.6** and continues westward through Cape May Harbor; the inlet and harbor were described in chapter 4.

(154) **Cape May Canal** is entered at **Mile 114.1**. Vessels transiting the canal should limit their speed to 5 knots and should proceed with special care in the vicinity of the bridges. A federal project provides for a depth of 12 feet through the canal to Delaware Bay. (See Notice to Mariners and latest editions of charts for controlling depths.)

(155) The mean range of tide is between 4 and 5 feet in Cape May Canal. The current velocity is 1.9 knots at the east end and

0.9 knot at the west end; passage of barge tows may be delayed because of tide and current conditions.

(156) The fixed highway bridge, over Cape May Canal at **Mile 114.3**, has a clearance of 55 feet. The overhead power cable immediately northwestward of the bridge has a clearance of 75 feet. The railroad bridge at **Mile 115.1** has a swing span with a clearance of 4 feet. The overhead power cables on each side of the railroad bridge have a clearance of 75 feet. A fixed highway bridge with a clearance of 55 feet is about 200 yards westward of the railroad bridge. Two submerged dolphins, hazardous to navigation, are on the southern edge of the channel on the west side of the bridge. Mariners are advised to proceed with caution when transiting this area. At **Mile 115.5**, an overhead TV cable with a clearance of 60 feet crosses the canal.

(157) The Cape May terminal of the **Cape May-Lewes Ferry** is on the north side of Cape May Canal at **Mile 117.3**. A private fog signal is on the terminal pier.

(158) At **Mile 117.7**, Cape May Canal enters Delaware Bay between stone jetties which are 2 miles north of Cape May Light. The outer end of the jetties are marked by lights; a fog signal is on the north jetty.

(159) Choppy seas are reported to form on Delaware Bay when the wind and tidal currents are contrary; it is especially hazardous at the entrance to Cape May Canal.

